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Frankfort, Kentucky 40622
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MEMO TO: Chief District Engineers
TEBM's for Construction
District Construction Engineers
Resident Engineers

FROM: Dexter Newman, P.E., Director
Division of Construction

DATE: August 12, 2005

SUBJECT: Hauling to Construction Projects

REFERENCE: Construction Memo No. 15-94

The KYTC's policy on hauling to construction projects has remained the same since Construction Memo No. 15-94 was issued November 29, 1994. We have had a huge personnel turnover since then and many people are unaware that this memo was ever written. With some slight rewording, it is being reissued almost in its original form.

The Kentucky Standard Specifications, Section 105.10, requires the Project Engineer to determine the gross weights permitted for hauling construction materials to a project. Kentucky Revised Statute 189.221 allows 80,000 pounds gross weight for trucks hauling to construction projects, except bridges, but does not nullify requirements relative to axle weights or weight per tire width.

Gross loads currently permitted on trucks hauling materials to construction projects over all roads and streets, excluding Interstate Highways, are governed by the license plate on the vehicle. The license number will determine what the vehicle is legally licensed to carry.

The legal load plus 5 percent tolerance is to be compared to the actual gross load being hauled by the vehicle. When the actual gross load exceeds the legally licensed load plus tolerance, then the vehicle load will be rejected. However, in no event shall the gross weight exceed eighty thousand pounds (80,000 lbs).

The legal weight limit is included on the apportioned license plates. Attached is a listing of the apportioned plates and their corresponding legal weight. This may be of assistance for determining allowable legal weights.

This procedure applies only to roads and streets, except interstates, and is used to determine acceptability of materials delivered to the construction project for payment in accordance with the Standard Specifications. This in no way implies conformance by the conveyor to laws and regulations issued by other governmental units, departments, or agencies. It is the conveyor's responsibility to conform to other laws and regulations.

Project Engineers will assume the following axle loadings for truck configurations, as described below, for determining legal loads on all Interstate Highways.

(1) Single axle (6 wheels): A single rear axle truck with dual wheels on the rear axle is assumed to load 600 pounds per inch of the tread width on the front axle and 20,000 pounds on the rear axle. Example: A truck having standard 10 inch tires would be permitted 32,000 pounds Gross.

(2) Dual axle (10 wheels): A truck having dual rear axles and dual tires on the rear axles is assumed to load 600 pounds per inch of tire tread width on the front axle and 34,000 pounds on the rear axles. Example: A truck having standard 10 inch tires would be permitted 46,000 pounds Gross.

(3) Tri-axle (14 wheels): A truck having a tri-axle arrangement in the rear with dual wheels on all the rear axles is assumed to load 600 pounds per inch of tire tread width on the front axle and 34,000 pounds on the rear axle when the distance between the centers of axle one (1) and three (3) is 96 inches or <u>less</u>. A gross weight of 48,000 pounds is permitted on three (3) axles in tridem arrangement (having three or more axles with four wheels each) if the distance between the centers of axle one (1) and three (3) is <u>more</u> than 96 inches but less than 120 inches, and the distance between any two adjacent axles of the tridem is 42 inches or more. Example: A truck having standard 10 inch tires would be permitted a maximum of 60,000 pounds Gross.

(4) Semi-tractor (18 wheels): A tractor-trailer combination where the tractor has one front axle and dual rear axles, plus a trailer with dual rear axles is assumed to load 600 pounds per inch of tire tread width on the front axle plus 34,000 pounds on the tractor rear axles plus 34,000 pounds on the trailer rear axles. Example: A truck having standard 10 inch tires would be permitted 80,000 pounds Gross. <u>Any tractor-trailer combination having more axles than this would be held to a maximum gross weight of 80,000 pounds by requirements of KRS 189.221</u>.

The attached charts will aid project personnel in calculating assumed gross loads. Example: To obtain the assumed gross load of a tri-axle truck with 16 tread width tires, go to the front axle chart and determine that the maximum allowable weight for the front axle is 19,200 pounds. Then determine that the maximum allowable weight for the rear axles is 48,000 pounds, as shown by the diagram. The total of the maximum allowable weights for the front and rear axles equals an assumed gross load of 67,200 pounds.

Loading and truck style make it impossible to accurately predict axle loadings. Therefore, these assumptions do not relieve a hauler of his responsibility to meet requirements of the law when his actual axle loadings are checked. A majority of trucks loaded, probably would not be able to load front axles to the assumed load, which would cause them to be in violation if they hauled the gross load described. Contractors and haulers should be warned that it is their responsibility to keep their hauling within the limits required by law (Standard Specification Section 107.01).

DN:jh/lm

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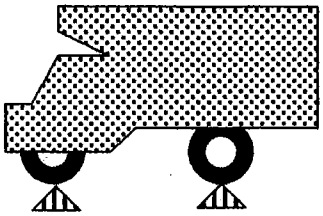
APPORTIONED PLATES

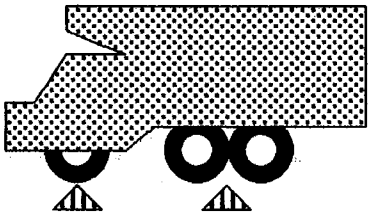
WA1 – 6,000
9AA – 10,000
9BA – 14,000
9CA – 18,000
9DA – 22,000
9EA – 26,000
9FA – 32,000
9GA – 38,000
9HA – 44,000
9JA – 55,000
9KA – 62,000
9LA – 73,280
9MA – 80,000

ASSUMED AXLE LOADINGS



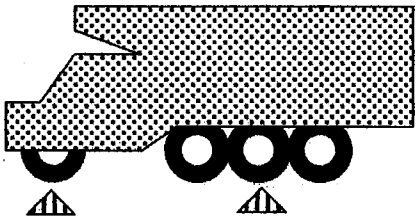
SINGLE REAR AXLE WITH DUAL TIRES ON REAR.
6 WHEELS

*12,000 + **20,000 = 32,000 GROSS LOAD



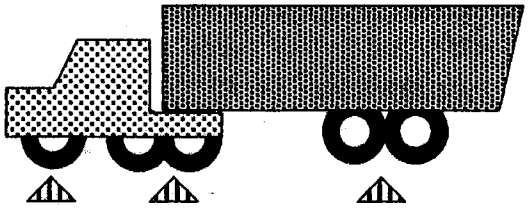
DUAL REAR AXLES WITH DUAL TIRES EXCEPT FRONT AXLE.
10 WHEELS

*12,000 + **34,000 = 46,000 GROSS LOAD



TRI - AXLE WITH DUAL TIRES EXCEPT FRONT AXLE.
14 WHEELS.

*12,000 + **48,000 = 60,000 GROSS LOAD



SEMI - TRAILER WITH DUAL TIRES EXCEPT FRONT AXLE.
18 WHEELS

*12,000 + **34,000 + ** 34,000 = 80,000 GROSS LOAD

USE THIS CHART TO DETERMINE FRONT AXLES ONLY.

FOR SINGLE FRONT AXLE

*TIRE WIDTH	**FRONT AXLE
8 INCH	9,600 LBS.
9 INCH	10,800 LBS.
10 INCH	12,000 LBS.
11 INCH	13,200 LBS.
12 INCH	14,400 LBS.
13 INCH	15,600 LBS.
14 INCH	16,800 LBS.
15 INCH	18,000 LBS.
16 INCH	19,200 LBS.
16 1/2 INCH & OVER	20,000 LBS.

* CALCULATED ON THE BASIS OF 600 LBS. PER INCH OF TREAD WIDTH.

DETERMINE WIDTHS FROM TIRE MARKINGS.

** 20,000 POUNDS IS THE MAXIMUM SINGLE AXLE LOAD PERMITTED BY STATUTE

* ASSUMES 10 INCH TREAD WIDTH ON FRONT TIRES.

** NOTE: REAR AXLES LOADINGS SHOWN ARE THE MAXIMUM PERMITTED BY LAW AND MAY NOT BE INCREASED.

CAUTION: CONTRACTOR OR HAULER MUST BE WARNED THAT PERMITTING GROSS WEIGHTS DOES NOT IMPLY THE LOADS WILL BE LEGAL WHEN INDIVIDUAL AXLES ARE WEIGHED. COMPLIANCE WITH WEIGHT LAWS IS THE HAULER'S RESPONSIBILITY.

8/24/94